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ABSTRACT

This report provides data on the academic achievement gap that separates low-income and minority students from other students, examining how well different groups of students perform in Pennsylvania and noting inequities in teacher quality, course offerings, and funding. Included are tables and data that provide: a frontier gap analysis (a comparison of Pennsylvania to the leaders in achievement and gap closing); student profile (the demographic distribution of youth in Pennsylvania); state performance (academic achievement as measured by college admissions tests and educational attainment); opportunity (well prepared teachers, challenging curricula, special student placements, effective instruction, and annual per pupil investments); minority achievement gains, state by state; and analysis of minority-white achievement gaps by subject area and grade level. Student achievement data are based on the National Assessment of Educational Progress (NAEP). Because Pennsylvania did not participate in any of the NAEP tests in 1998, and participated only in one of three tests given in 1996, it is impossible to provide a complete profile of student achievement in Pennsylvania. (Contains 24 references.) (SM)

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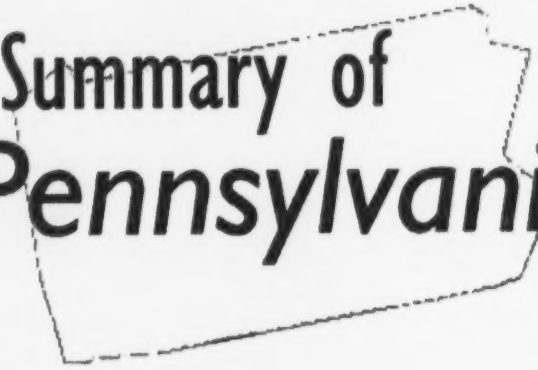
State Summary of Pennsylvania



To eliminate the achievement gap that separates low-income and minority students from other students, we must understand what that gap looks like and where it originates. How well are different groups of students in your state performing? Could inequities in course selection or teacher quality be contributing to the gap? This State Summary Report provides at least some of the answers.

PENNSYLVANIA HIGHLIGHTS

- Student achievement data are based on NAEP. Pennsylvania did not participate in any of the NAEP tests in 1998, and participated in only one of the three tests in 1996. It is therefore impossible to provide a full public picture of achievement in Pennsylvania.

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2

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Table of Contents

Frontier Gap Analysis 1
a comparison of your state to the leaders in achievement and gap closing

Student Profile 2
the demographic distribution of youth in your state

State Performance 3
Academic achievement 3
NAEP, ACT/SAT scores by group
Attainment 7
high school & college by group

Opportunity 8
Well-prepared teachers 8
Challenging curricula 8
Special student placements 9
Effective instruction 9
Investments 10

Biggest Gainer 12

How big is the achievement gap in your state? 15
analysis of minority-White gaps by subject area and grade level

References 23

PLEASE NOTE *that the State Summary Reports are merely a selection of the data from the Education Watch Interactive Data site. For more complete data, and for more cross-state comparisons, please visit the site at www.edtrust.org. Do remember, however, that you may have fuller, richer or more current data sets in your state for some of the indicators we report, because we only use data that can be compared across states. We therefore encourage you to gather and examine a wide range of data from your own state and local districts. In this way, communities will come to see a full picture of how their students are faring and what can be done to improve results.*

PENNSYLVANIA

Frontier Gap Analysis

Education Watch Online introduces a new way to look at achievement gaps in each state: by comparing them with the "frontier" state for a particular group of students, that is, the state with the highest average score for that group. The comparison shows that, in most cases, achievement gaps would shrink dramatically if a state's poor or minority students performed as well as the same group of students in the frontier state. But that's only part of a longer journey; visit the Education Watch Online Interactive Web site to see how far your state has to go before all groups of students perform at the "proficient" level on the National Assessment of Educational Progress (NAEP).

How to read the table:

Within-State Achievement Gap: For African American and Latino students, this is the difference between that group's average score and the average score of white students on a particular test. For low-income students, this is the difference between their average score and the average score of non-poor students on the test.

Example: "On Average, Pennsylvania's African American students scored 33 points lower than the state's White students on NAEP's 1996 4th Grade Math Assessment."

Frontier State for Group: This is the state where a particular group of students - African American, Latino, or low-income - scores the highest on the test. But, because such students can achieve much higher than they do even in the frontier state, the current frontier should be viewed as a short-term target rather than a long-term goal.

Example: "African American students in Texas out-perform African American students in all other states on NAEP's 1996 4th Grade Math Assessment."

Group's Distance to Frontier State: For African American, Latino, and low-income students, this is the difference between their average score and the average score for the same group of students in the frontier state.

Example: "African American students in Pennsylvania scored 13 points behind African American students in Texas, the frontier state for African American students on that test."

Amount State's Achievement Gap Would Shrink: This is approximately how much the state's achievement gap would shrink if its African American, Latino, and low-income students scored as well as the same group of students in the frontier state.

Example: "If Pennsylvania's African American 4th graders scored as well as those in Texas, the state's math achievement gap between African American and White 4th Graders would shrink by 39%."

NOTE: A difference of 10 points is roughly equivalent to one year's worth of learning.

NAEP Assessment	Group	Within-State Achievement Gap	Frontier State for Group	Group's Distance to Frontier	Amount State's Achievement Gap Would Shrink *
4th Grade Math (1996)	African American	33	TX	13	39%
	Latino	25	ND	15	60%
	Low-Income	24	ND	12	50%
8th Grade Math (1996)	African American	STATE DID NOT PARTICIPATE IN TEST			
	Latino				
	Low-Income				
8th Grade Science (1996)	African American	STATE DID NOT PARTICIPATE IN TEST			
	Latino				
	Low-Income				
4th Grade Reading (1998)	African American	STATE DID NOT PARTICIPATE IN TEST			
	Latino				
	Low-Income				
8th Grade Reading (1998)	African American	STATE DID NOT PARTICIPATE IN TEST			
	Latino				
	Low-Income				
8th Grade Writing (1998)	African American	STATE DID NOT PARTICIPATE IN TEST			
	Latino				
	Low-Income				

* Calculations take into account decimals. For clarity of presentation, data are displayed as whole numbers. Therefore, some figures may differ slightly from hand calculations.

Note: Low-income refers to students eligible for free or reduced price lunch.

SOURCE: Education Trust calculations based on average scale scores on the National Assessment of Educational Progress as reported by the National Center for Education Statistics.

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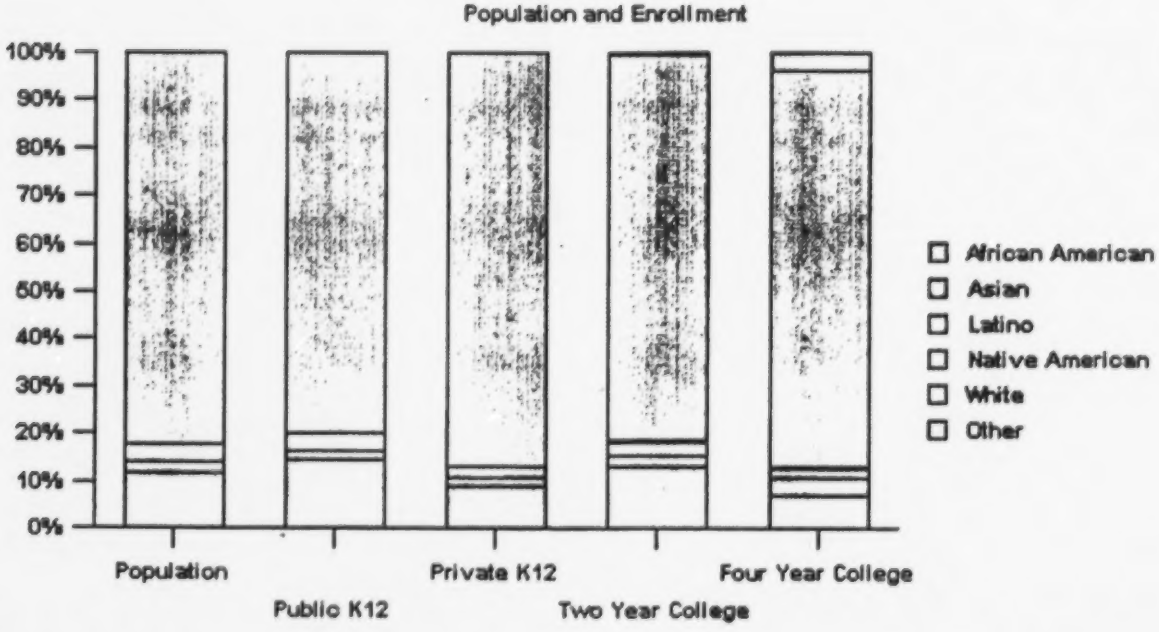
Student Profile

STUDENT PROFILE

Population and enrollments: These data will offer a picture of the student population in your state. Comparing the demographic distribution of students across each educational level will show what happens to children as they journey through the education system. Significant differences should raise questions about equity.

	Population Ages 5-24	Public K-12	Private K-12	Two Year Colleges	Four Year Colleges
African American	11.8%	14.5%	8.7%	12.9%	7.0%
Asian	2.0%	1.8%	2.1%	2.7%	3.9%
Latino	3.9%	3.8%	2.3%	2.5%	1.8%
Native American	0.1%	0.1%	0.1%	0.4%	0.2%
White	82.2%	79.7%	86.8%	81.0%	83.4%
Other				0.5%	3.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Number	3,165,637	1,815,151	350,983	120,486	456,723



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State Performance

ACADEMIC ACHIEVEMENT

NAEP achievement levels: The National Assessment of Educational Progress (NAEP) is administered to representative samples of students nationally and in participating states. NAEP achievement is reported by percents in four categories: Advanced, Proficient, Basic and Below Basic. "Proficient" indicates the desired level of competency for students at a particular grade in a particular subject. In this indicator, closing the achievement gap between groups is critical, but it is not enough. Schools have a long way to go to move all American young people to proficiency.

1998 NAEP 8th grade reading

	Adv.	Prof.	Basic	< Basic
African American				
Asian				
Latino				
Native American				
White				
All				
Non-Poor				
Poor				

Did Not Participate

*Note: all proficiency level data in percents.

1998 NAEP 8th grade writing

	Adv.	Prof.	Basic	< Basic
African American				
Asian				
Latino				
Native American				
White				
All				
Non-Poor				
Poor				

Did Not Participate

*Note: all proficiency level data in percents.

1998 NAEP 4th grade reading

	Adv.	Prof.	Basic	< Basic
African American				
Asian				
Latino				
Native American				
White				
All				
Non-Poor				
Poor				

Did Not Participate

*Note: all proficiency level data in percents.

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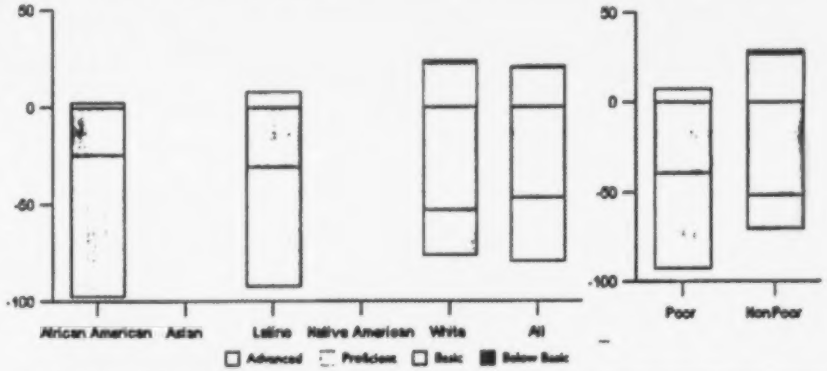
State Performance

1996 NAEP 4th grade math

	Adv.	Prof.	Basic	< Basic
African American	0	2	25	73
Asian				
Latino	0	8	31	61
Native American				
White	2	22	53	23
All	1	20	47	32
Non-Poor	2	27	52	19
Poor	0	7	40	53



*Note: all proficiency level data in percents.

1996 NAEP 8th grade math

	Adv.	Prof.	Basic	< Basic
African American				
Asian				
Latino				
Native American				
White				
All				
Non-Poor				
Poor				

Did Not Participate

*Note: all proficiency level data in percents.

1996 NAEP 8th grade science

	Adv.	Prof.	Basic	< Basic
African American				
Asian				
Latino				
Native American				
White				
All				
Non-Poor				
Poor				

Did Not Participate

*Note: all proficiency level data in percents.

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State Performance

ACADEMIC ACHIEVEMENT

NAEP multiyear trends: Looking at change over time both in absolute student performance and in achievement gaps can show whether a state is making progress, holding static, or even backsliding. This can help states focus actions needed for improvement, and measure whether existing initiatives are effectively meeting their goals in achievement and equity.

1992-98 4th grade reading

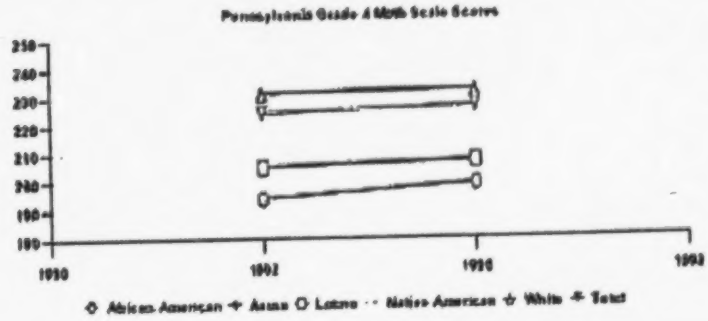
No Trend Data

Gap Changes Over Time

Year	African American-White Gap	Latino-White Gap
1992		
1994		
1998		
Change* 92–98		

Note: Change based on absolute difference in average group scale score—interpret with caution (not necessarily statistically significant)
*positive change=gap widened; negative change=gap narrowed

1992-96 4th grade math



Gap Changes Over Time

Year	African American-White Gap	Latino-White Gap
1992	37	27
1996	33	25
Change* 92–96	-4	-2

Note: Change based on absolute difference in average group scale score—interpret with caution (not necessarily statistically significant)
*positive change=gap widened; negative change=gap narrowed

1990-96 8th grade math

No Trend Data

Gap Changes Over Time

Year	African American-White Gap	Latino-White Gap
1990		
1992		
1996		
Change* 90–96		

Note: Change based on absolute difference in average group scale score—interpret with caution (not necessarily statistically significant)
*positive change=gap widened; negative change=gap narrowed

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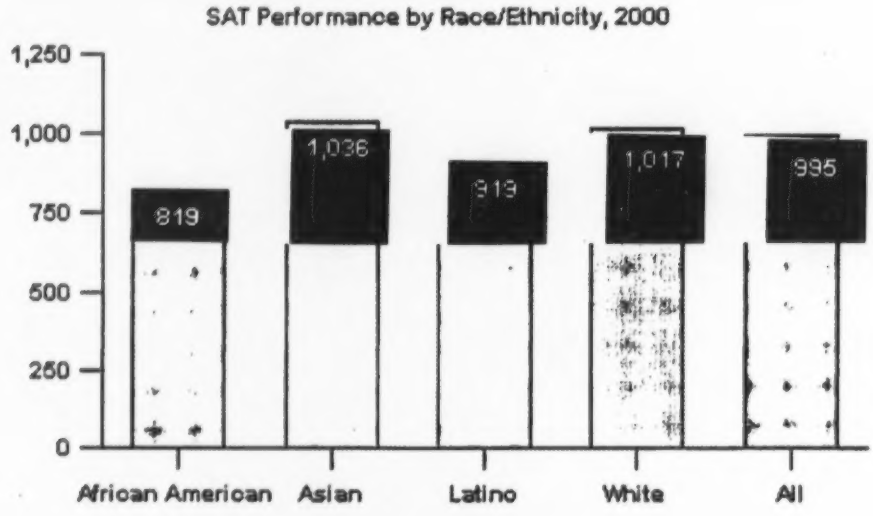
State Performance

Average scores on college admissions tests: While increasing numbers of minorities are taking college admissions tests, in virtually every state, African American, Latino and Native American students still score well below other students. To close this gap, states should ensure that all students complete a rigorous college preparatory sequence, and that all students are held to the same expectations of postsecondary attainment. The SAT and ACT are the major nationally used college admissions tests. Below we report the scores for the predominant test used by your state's colleges and universities.

SAT Performance



Note: A perfect score for the SAT is 1600. A perfect score for the ACT is 36.

Distribution of SAT Test Takers, 2000

	Test Takers
African American	7.8%
Asian	3.1%
Latino	1.8%
Native American	l.r.
White	87.3%
Total	100.0%
Number	81,220

l.r. low reliability

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State Performance

ATTAINMENT

In order to determine equity in attainment rates, we compare regular diploma recipients with the number of 8th graders four years earlier, and report freshmen enrollments compared to bachelor's degrees four years later. Taken together, these show the flow of groups of students from middle school to high school graduation and through postsecondary education. Although these data do not track individual students from year to year, they should paint a fairly representative picture of who makes it through high school and college.

8th Graders vs. Diplomas

	8th Graders 1993-94	Diplomas 1998
African American	11.9%	9.7%
Asian	1.7%	2.1%
Latino	2.9%	2.4%
Native American	0.1%	0.1%
White	83.4%	85.7%
Total	100.0%	100.0%
Number	130,209	110,919

Chances For College, 1998

In the fall of 1998, the percentage of 19 year-olds in Pennsylvania who were enrolled in college was (includes part-time and full-time students): 46.9%

Freshmen vs. Degrees Awarded

	Freshmen* 1993-94	Bachelor's Degrees 1997
African American	8.3%	4.8%
Asian	3.4%	3.8%
Latino	2.0%	1.5%
Native American	l.r.	l.r.
White	84.7%	87.5%
Other	1.5%	2.3%
Total	100.0%	100.0%
Number	100,190	62,443

*Note: Includes first-time full time and part time freshmen at 2-year and 4-year institutions.
l.r. low reliability

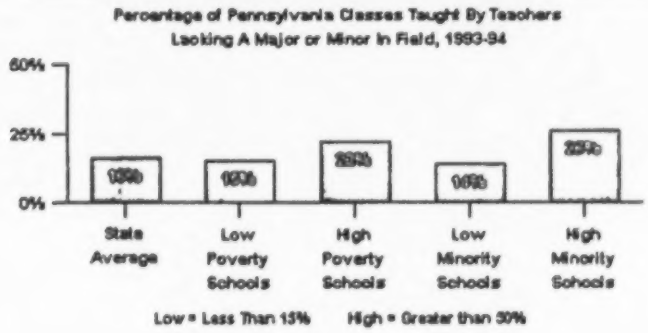
PENNSYLVANIA

Opportunity

WELL-PREPARED TEACHERS

The best educational investment a state can make is to give each student a knowledgeable teacher. One key measure of teachers' qualifications is whether they have a major in their particular field. The distribution of well-prepared teachers is an important indicator of equal educational opportunity for different groups of students.

Teachers Without Degree in Field (Secondary)



Math Students With Math-Major Teachers

Did Not Participate in 1996 NAEP Grade 8 Math Assessment

CHALLENGING CURRICULA

Industry has joined colleges in the demand for individuals with high-level knowledge and skills. This means that all students need a rigorous curriculum in order to be prepared for success, whether they choose college or work. Yet too few students have the opportunity to gain these skills through rigorous math and science courses.

Percentage of students who take high-level courses: Course-taking disaggregated by race and ethnicity is an indicator of the amount of access students have to challenging subject matter and the essential skills it develops for life after high school.

Example for reading this chart: Of all African American 8th graders, this percentage took Algebra I.

Subject	African American	Asian	Latino	Native American	White	All
8th Grade Algebra						
Algebra II by Graduation						
Chemistry by Graduation						

Composition of AP test takers: Students take Advanced Placement (AP) exams after completing year-long AP courses, typically among the highest level offered in high schools. In a system where all students have equal access to these opportunities, the percentage of test-takers by race and ethnicity would be proportional to their representation in public K-12 enrollment.

Example: Of all AP test-takers, this percentage were African Americans

AP Test Takers, 2000

	Public K-12	English/Composition	Calculus AB	Biology
African American	14.5%	2.1%	2.5%	3.0%
Asian	1.8%	6.7%	7.9%	9.0%
Latino	3.8%	1.3%	1.1%	1.3%
Native American	0.1%	l.r.	l.r.	l.r.
White	79.7%	89.9%	88.5%	86.7%
Total	100.0%	100.0%	100.0%	100.0%
Number	1,815,151	2,340	5,228	3,072

l.r. low reliability

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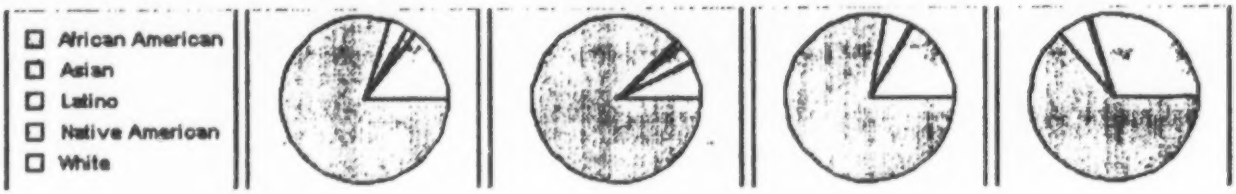
Opportunity

SPECIAL STUDENT PLACEMENTS

The school programs listed below vary a great deal in their level of curriculum, expectations, and instruction. Poor and minority students should not face disproportionate placement in programs with lower academic expectations. If there is equity in placements, the number of Latino students, for example, placed in gifted and talented programs and in special education should be proportional to Latinos enrolled in K-12. Although suspensions are not precisely an academic program, we include data about them because too often they represent a placement out of the system altogether.

Student Placement, 1998

	Public K-12	Gifted and Talented	Special Education	Suspensions
African American	14.5%	7.13%	16.35%	29.53%
Asian	1.8%	3.77%	0.61%	0.88%
Latino	3.8%	1.36%	4.9%	5.87%
Native American	0.1%	0.12%	0.08%	0.04%
White	79.7%	87.61%	78.06%	63.68%
Total	100.0%	100.0%	100.0%	100.0%
Number	1,815,151	90,825	151,789	118,367



EFFECTIVE INSTRUCTION

Students can do no better than the assignments and instruction they are given. Research shows that students whose teachers emphasize mathematical problem solving and hands-on science activities score significantly higher on NAEP. How often students experience these practices is another indicator of educational opportunity.

Math and Science Practice (8th Grade) 1996

Emphasis on Solving Complex Math Problems

Did Not Participate in this NAEP Assessment

Frequency of Hands on Science

Did Not Participate in this NAEP Assessment

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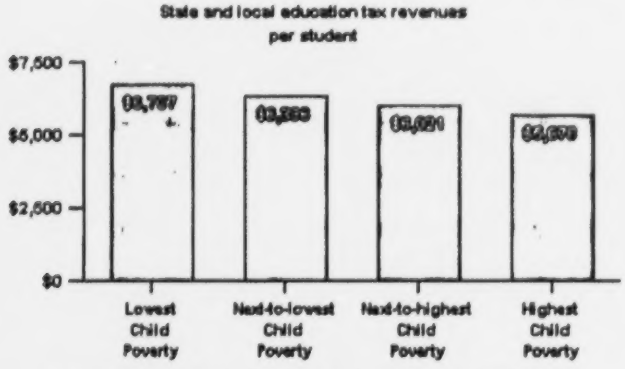
Opportunity

INVESTMENTS

State and local education dollars by district poverty and minority enrollment, 1996-97: A growing body of research shows that additional dollars spent on the right things can substantially raise the achievement of poor and minority students. But despite decades of school finance litigation in many states, students in districts with the greatest challenges by and large still receive the fewest resources.

Education Dollars by District Poverty



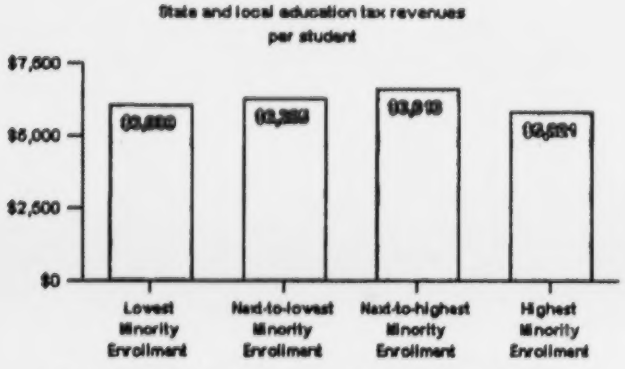
NOTE: Dollars are adjusted for student needs and regional cost differences. Districts are divided into quarters by child poverty.

Analysis

Research suggests that investing more funds in education services for disadvantaged students can help close the achievement gap.

In Pennsylvania, districts with the highest child poverty rates have $1,059 fewer state and local dollars to spend per student compared with the lowest-poverty districts. That translates into a total $26,475 for a typical classroom of 25 students.

Education Dollars by District Minority Enrollment



NOTE: Dollars are adjusted for student needs and regional cost differences. Districts are divided into quarters by enrollment.

Analysis

Research suggests that investing more funds in education services for disadvantaged students can help close the achievement gap.

In Pennsylvania, districts with the highest minority enrollments have $218 fewer state and local dollars to spend per student compared with the lowest-minority districts. That translates into a total $5,450 for a typical classroom of 25 students.

PENNSYLVANIA

Opportunity

Per Pupil Investment, 1999-2000: To facilitate comparison across states, data are adjusted to reflect the higher cost of educating students who live in places where educational supplies and sources tend to be more expensive, such as large cities. These numbers will therefore differ from unadjusted Per Pupil Expenditure figures. Even cost adjusted dollars per students vary a great deal from state to state, from a low in Utah of $4,280, to a high of $9,057 in West Virginia.

The State average per pupil investment was..... **$7,848**

Effort, 1997-98: By surfacing the level of a state's commitment, this calculation of "effort" allows comparisons between wealthy and less affluent states that may not be apparent when examining per pupil spending alone. For example, a state with low wealth may rank low on per pupil spending, but an examination of "Effort" shows that a high percentage of its wealth is devoted to education. The state in this example would rank favorably against a wealthier state that commits a smaller percentage of its resources to education, even though the latter state's actual "per pupil" dollars may be larger. Among the 50 states this ranges from a low of $27.07 in Delaware, to a high of $52.77 in Vermont.

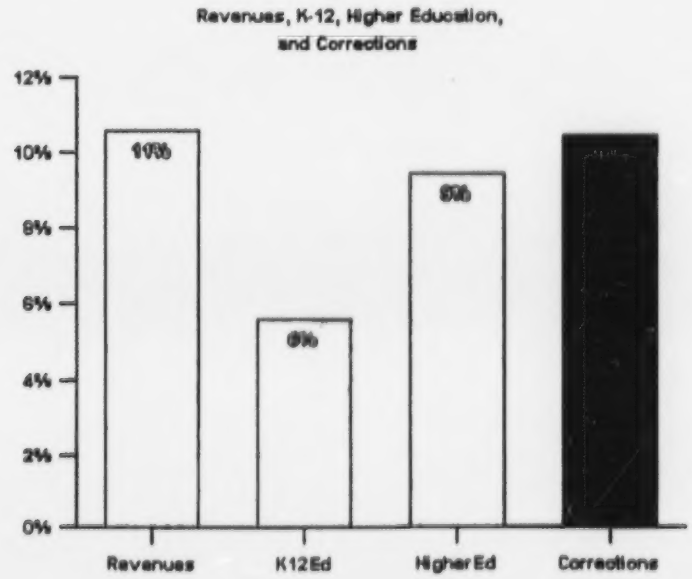
For every $1,000 in annual personal income, the combined state and local investment in K-12 education was..... **$40.24**

College vs. Prison, 1998

Compares the annual cost of maintaining an individual in prison to the price of tuition, room and board at the state's leading public university.

Institution	Annual College Cost	Annual Prison Cost
Pennsylvania State University	$10,602.00	$23,564.40

Change in state investments, 1997-99: By comparing trends in total state spending and on elementary/secondary education, higher education and corrections over a two-year period, we can gauge the priority a state gives to investing in education.



Minority Achievement Gains, State by State

4th Grade Math Scale Scores, 1992–96

Where are minority students making the largest gains?
The following tables show how many points African American and Latino students gained or lost on the National Assessment of Educational Progress (NAEP). The tables only include those states that participated in both years and had enough members of each student group in the testing sample.

African American

State	1992	1996	Change
Massachusetts	194	208	+14
Michigan	186	199	+13
Texas	199	212	+13
Iowa	194	205	+11
North Carolina	194	205	+11
Connecticut	195	206	+11
Indiana	196	206	+10
Louisiana	187	196	+9
NATION	**192**	**200**	**+8**
Nebraska	191	198	+7
Mississippi	190	197	+7
Virginia	198	204	+6
Tennessee	193	198	+5
Alabama	189	194	+5
Missouri	196	201	+5
New Jersey	199	204	+5
Wisconsin	196	201	+5
Pennsylvania	194	199	+5
Florida	191	195	+4
Arkansas	189	193	+4
Maryland	195	199	+4
New York	200	204	+4
California	184	188	+4
Georgia	197	201	+4
Hawaii	200	204	+4
South Carolina	195	199	+4
Rhode Island	191	194	+3
Kentucky	201	204	+3
New Mexico	203	205	+2
West Virginia	204	205	+1
Arizona	199	200	+1
Minnesota	194	193	-1
Delaware	198	195	-3
Colorado	200	196	-4
District Of Columbia	190	184	-6

Latino

State	1992	1996	Change
Tennessee	193	209	+16
Minnesota	208	219	+11
Rhode Island	190	201	+11
Mississippi	186	196	+10
Arkansas	195	203	+8
Texas	209	216	+7
North Dakota	215	222	+7
Missouri	208	214	+6
West Virginia	204	210	+6
North Carolina	200	206	+6
New York	199	205	+6
Indiana	210	215	+5
California	192	197	+5
Massachusetts	207	211	+4
Georgia	198	202	+4
NATION	**201**	**205**	**+4**
Colorado	206	210	+4
Hawaii	199	202	+3
Alabama	193	196	+3
Pennsylvania	205	207	+2
Virginia	212	214	+2
New Mexico	203	205	+2
Kentucky	199	201	+2
Wisconsin	213	214	+1
Connecticut	206	207	+1
Arizona	203	204	+1
Florida	207	207	0
Maryland	207	207	0
New Jersey	206	206	0
District of Columbia	182	182	0
Michigan	206	205	-1
Utah	209	208	-1
South Carolina	200	199	-1
Nebraska	210	209	-1
Maine	220	218	-2
Delaware	199	194	-5
Wyoming	215	209	-6
Louisiana	200	193	-7
Iowa	219	212	-7

Minority Achievement Gains, State by State

8th Grade Math Scale Scores, 1990–96

Where are minority students making the largest gains?
The following tables show how many points African American and Latino students gained or lost on the National Assessment of Educational Progress (NAEP). The tables only include those states that participated in both years and had enough members of each student group in the testing sample.

African American

State	1990	1996	Change
Nebraska	235	256	+21
Colorado	237	255	+18
Rhode Island	227	244	+17
North Carolina	233	247	+14
Michigan	232	246	+14
Texas	236	249	+13
West Virginia	235	246	+11
New York	236	246	+10
Minnesota	239	249	+10
Arizona	245	254	+9
Kentucky	240	248	+8
California	233	239	+6
Florida	231	236	+5
Louisiana	230	235	+5
NATION	**237**	**242**	**+5**
Maryland	238	243	+5
Indiana	243	247	+4
Connecticut	241	245	+4
Arkansas	232	235	+3
Wisconsin	238	240	+2
Delaware	242	244	+2
Virginia	242	244	+2
Georgia	240	241	+1
District of Columbia	231	231	0
Alabama	234	233	-1

Latino

State	1990	1996	Change
North Carolina	218	253	+35
Minnesota	239	266	+27
Louisiana	226	242	+16
North Dakota	249	264	+15
Connecticut	237	252	+15
Georgia	231	246	+15
Virginia	243	258	+15
Hawaii	231	244	+13
West Virginia	232	244	+12
Iowa	256	268	+12
Maryland	237	248	+11
Texas	245	256	+11
Colorado	247	257	+10
Indiana	245	255	+10
California	237	246	+9
Rhode Island	230	239	+9
Arizona	242	251	+9
Wisconsin	250	259	+9
New York	237	245	+8
Florida	245	253	+8
NATION	**242**	**250**	**+8**
Michigan	243	249	+6
Oregon	254	259	+5
Alabama	227	232	+5
New Mexico	247	252	+5
District of Columbia	217	221	+4
Delaware	242	244	+2
Wyoming	255	256	+1
Nebraska	253	253	0
Montana	263	257	-6

Minority Achievement Gains, State by State

4th Grade Reading Scale Scores, 1992–98

Where are minority students making the largest gains?
The following tables show how many points African American and Latino students gained or lost on the National Assessment of Educational Progress (NAEP). The tables only include those states that participated in both years and had enough members of each student group in the testing sample.

African American

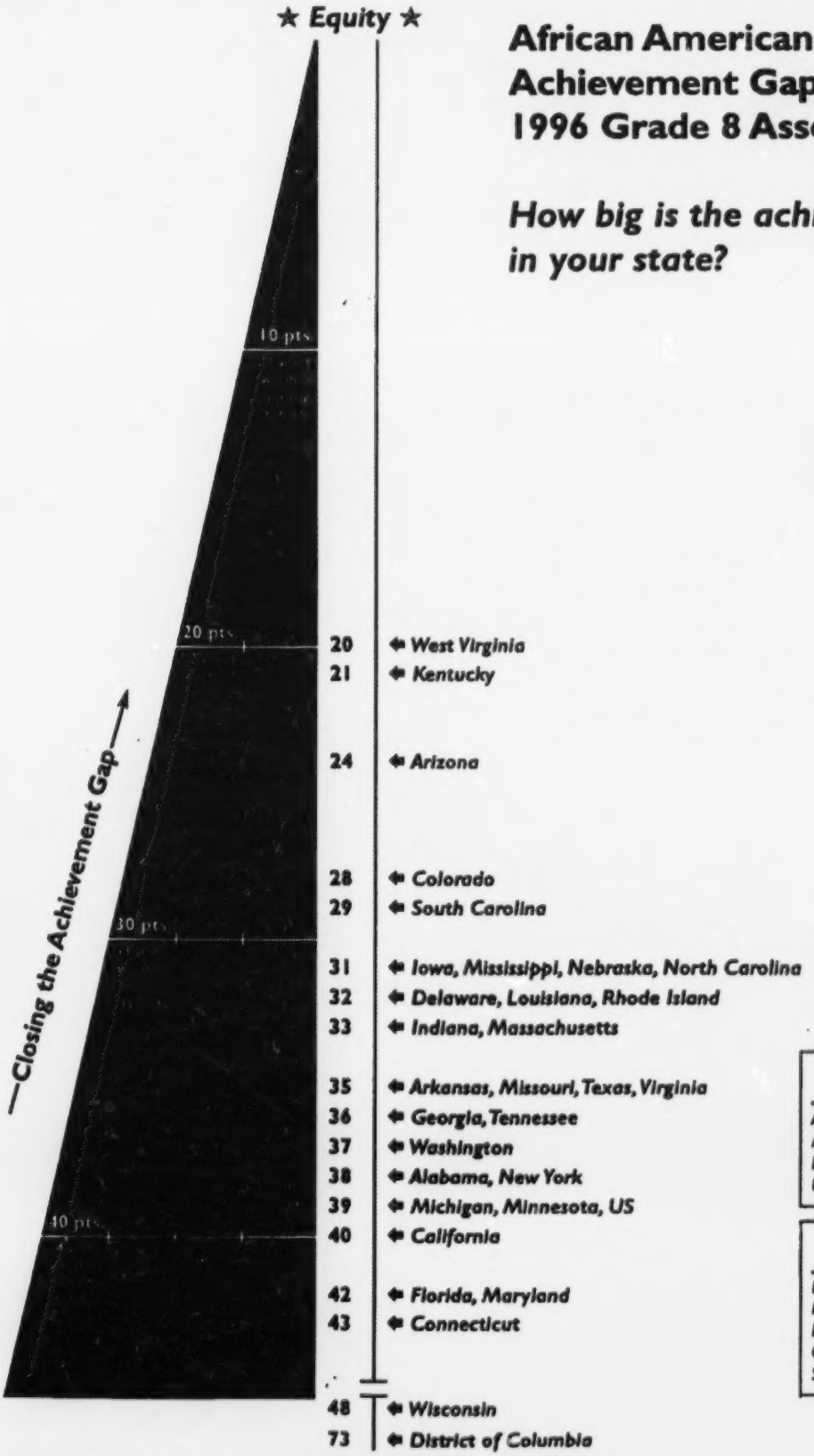
State	1992	1998	Change
Rhode Island	187	197	+10
Connecticut	196	205	+9
North Carolina	194	200	+6
Mississippi	186	192	+6
Alabama	188	193	+5
California	184	189	+5
Delaware	195	199	+4
Florida	186	189	+3
Michigan	188	191	+3
Hawaii	192	195	+3
Maryland	193	195	+2
South Carolina	195	197	+2
NATION	**192**	**193**	**+1**
Colorado	202	202	0
Tennessee	193	193	0
Virginia	203	203	0
Kentucky	197	196	-1
Minnesota	191	190	-1
Texas	200	197	-3
Georgia	196	193	-3
Massachusetts	205	202	-3
Arkansas	190	186	-4
Louisiana	191	186	-5
Missouri	196	190	-6
District Of Columbia	186	180	-6
Wisconsin	200	193	-7
New York	202	193	-9
Oklahoma	201	192	-9
Arizona	200	190	-10
West Virginia	204	192	-12
Iowa	209	192	-17
New Mexico	202	183	-19

Latino

State	1992	1998	Change
Connecticut	193	205	+12
New York	187	194	+7
Delaware	188	193	+5
North Carolina	192	196	+4
Maryland	197	200	+3
Texas	201	204	+3
Georgia	192	193	+1
Alabama	190	190	0
Colorado	202	202	0
Kentucky	195	195	0
Minnesota	203	203	0
West Virginia	196	196	0
Maine	209	208	-1
Florida	201	200	-1
Massachusetts	201	200	-1
Arkansas	188	187	-1
Oklahoma	208	207	-1
Iowa	211	210	-1
New Mexico	200	199	-1
Wyoming	209	207	-2
Mississippi	185	183	-2
California	183	181	-2
Wisconsin	210	208	-2
Tennessee	196	193	-3
NATION	**199**	**195**	**-4**
Virginia	202	198	-4
Louisiana	188	184	-4
Michigan	198	193	-5
Rhode Island	191	185	-6
South Carolina	195	189	-6
Missouri	202	196	-6
District Of Columbia	177	168	-9
Hawaii	193	183	-10
Arizona	198	186	-12
New Hampshire	215	201	-14
Utah	204	189	-15

African American-White Math Achievement Gaps: NAEP 1996 Grade 8 Assessment

How big is the achievement gap in your state?



States with sample sizes too small

Alaska, Hawaii, Maine, Montana, New Mexico, North Dakota, Oregon, Utah, Vermont, Wyoming

States that did not participate

Idaho, Illinois, Kansas, Nevada, New Hampshire, New Jersey, Ohio, Oklahoma, Pennsylvania, South Dakota

Note: Gaps are measured by the point difference between minority and White average scale scores.

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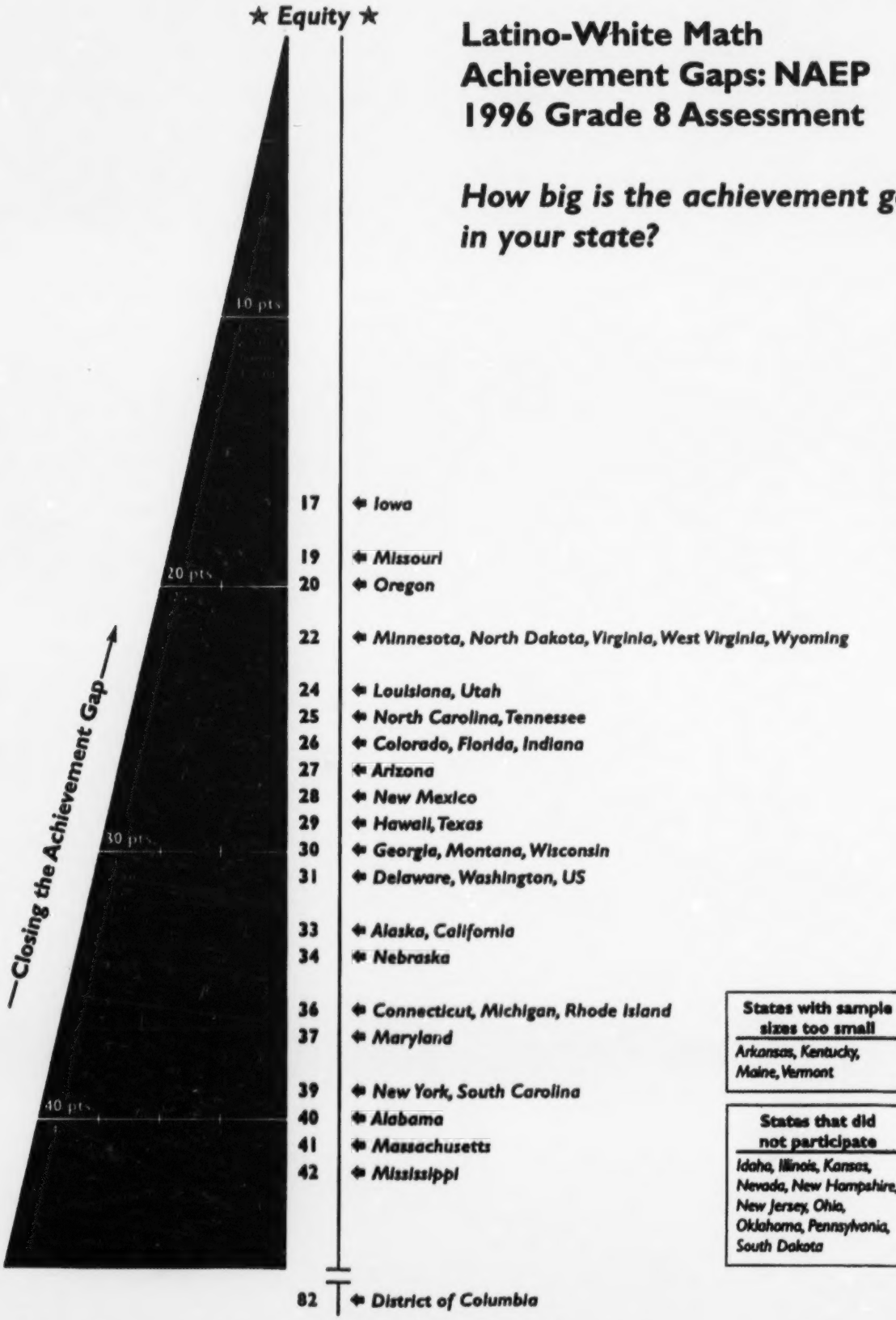
Latino-White Math Achievement Gaps: NAEP 1996 Grade 8 Assessment

How big is the achievement gap in your state?



States with sample sizes too small

Arkansas, Kentucky, Maine, Vermont

States that did not participate

Idaho, Illinois, Kansas, Nevada, New Hampshire, New Jersey, Ohio, Oklahoma, Pennsylvania, South Dakota

Note: Gaps are measured by the point difference between minority and White average scale scores.

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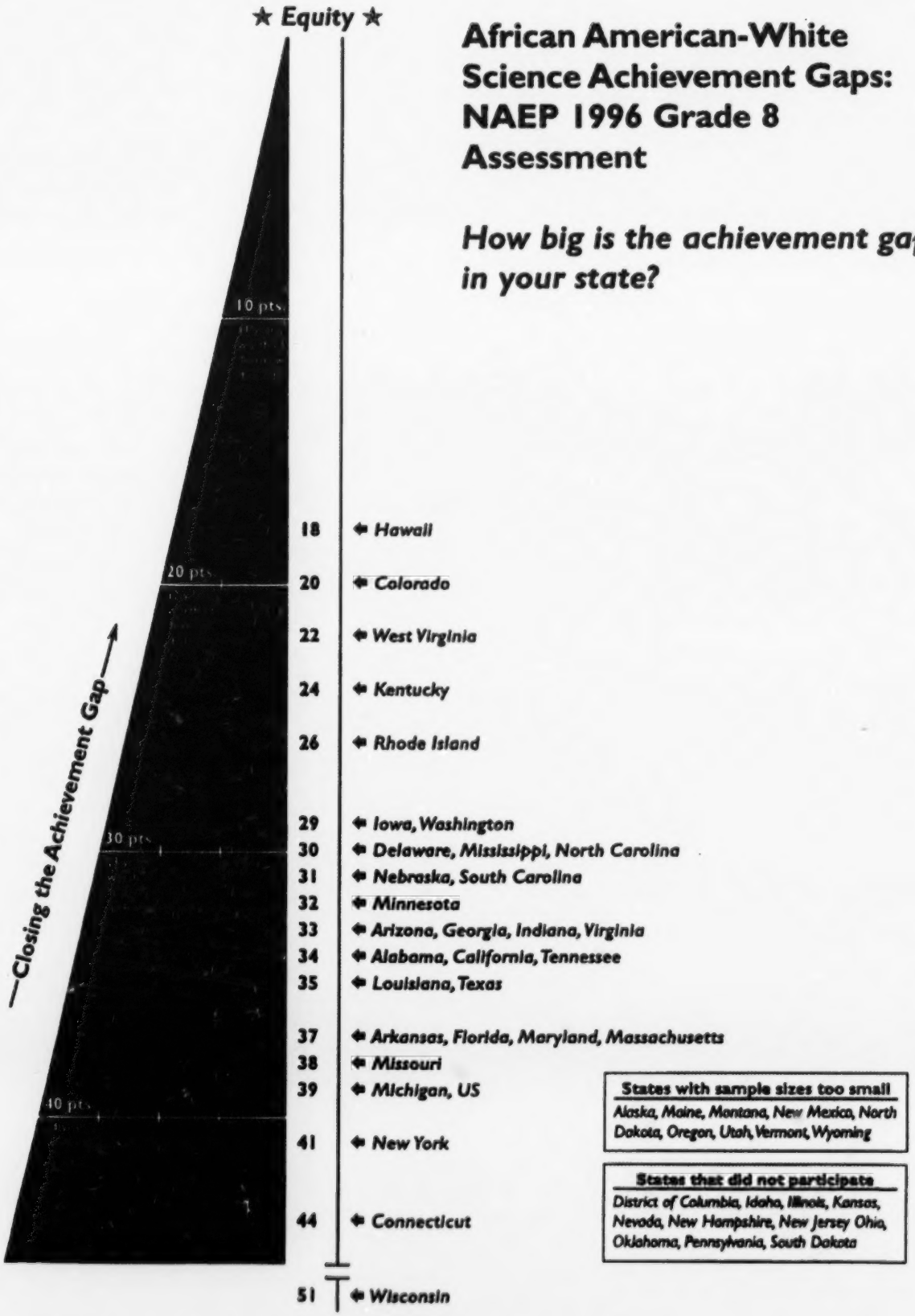

African American-White Science Achievement Gaps: NAEP 1996 Grade 8 Assessment

How big is the achievement gap in your state?

Note: Gaps are measured by the point difference between minority and White average scale scores.

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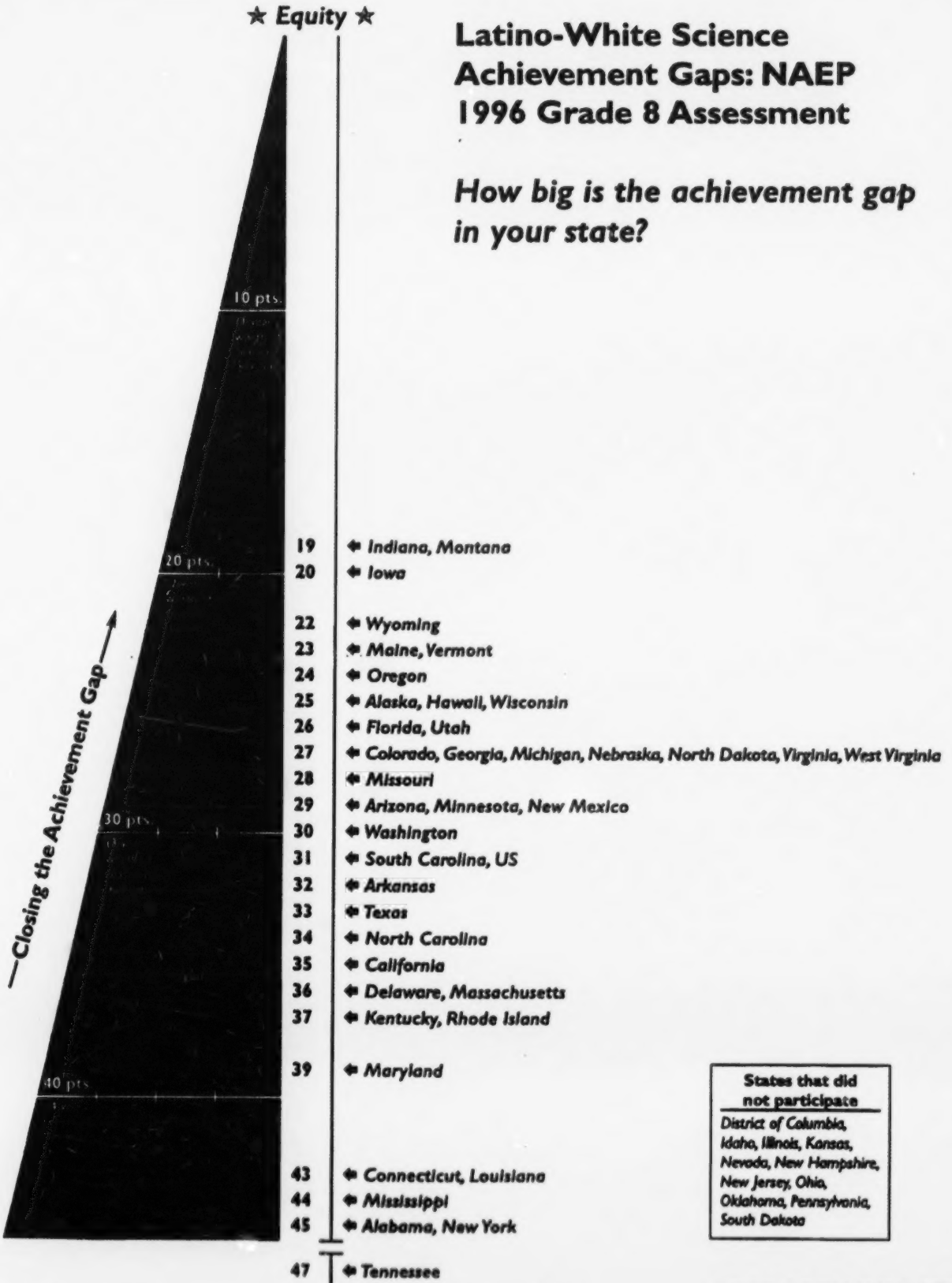
Latino-White Science Achievement Gaps: NAEP 1996 Grade 8 Assessment

How big is the achievement gap in your state?



States that did not participate

District of Columbia, Idaho, Illinois, Kansas, Nevada, New Hampshire, New Jersey, Ohio, Oklahoma, Pennsylvania, South Dakota

Note: Gaps are measured by the point difference between minority and White average scale scores.

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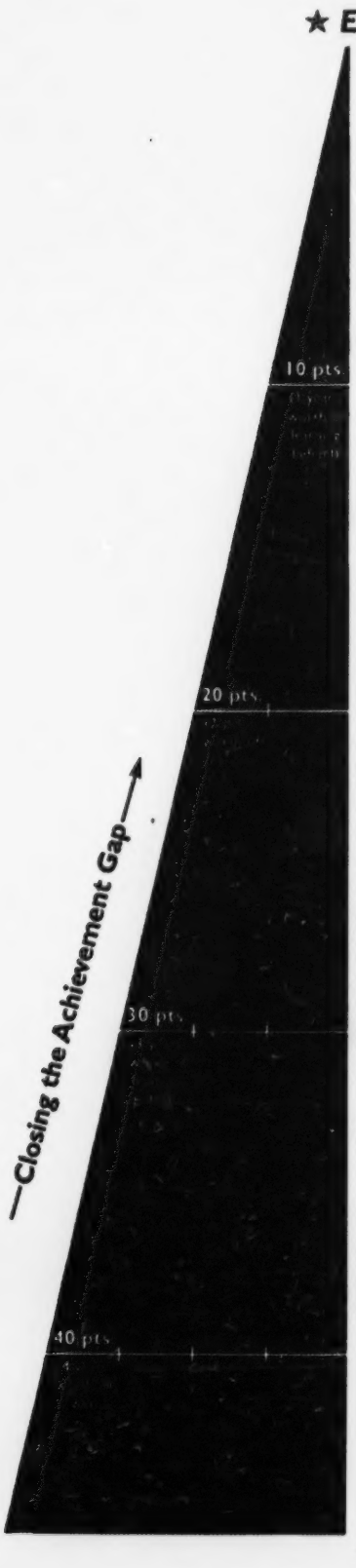
African American-White Reading Achievement Gaps: NAEP 1998 Grade 8 Assessment

How big is the achievement gap in your state?



16	⇐ *Hawaii, Rhode Island*
17	⇐ *West Virginia*
18	⇐ *Oklahoma*
19	⇐ *Kansas*
20	⇐ *Washington*
22	⇐ *North Carolina*
23	⇐ *Kentucky, Massachusetts*
24	⇐ *South Carolina*
25	⇐ *Alabama, California, Delaware, Mississippi, Missouri, Nevada, Virginia*
26	⇐ *Arizona*
27	⇐ *Louisiana*
28	⇐ *Arkansas, Tennessee, Texas*
29	⇐ *New York, US*
30	⇐ *Florida, Georgia*
31	⇐ *Colorado, Maryland*
33	⇐ *Wisconsin*
37	⇐ *Connecticut*
39	⇐ *Minnesota*
46	⇐ *District of Columbia*

States with sample sizes too small

Montana, New Mexico, Oregon, Utah, Wyoming

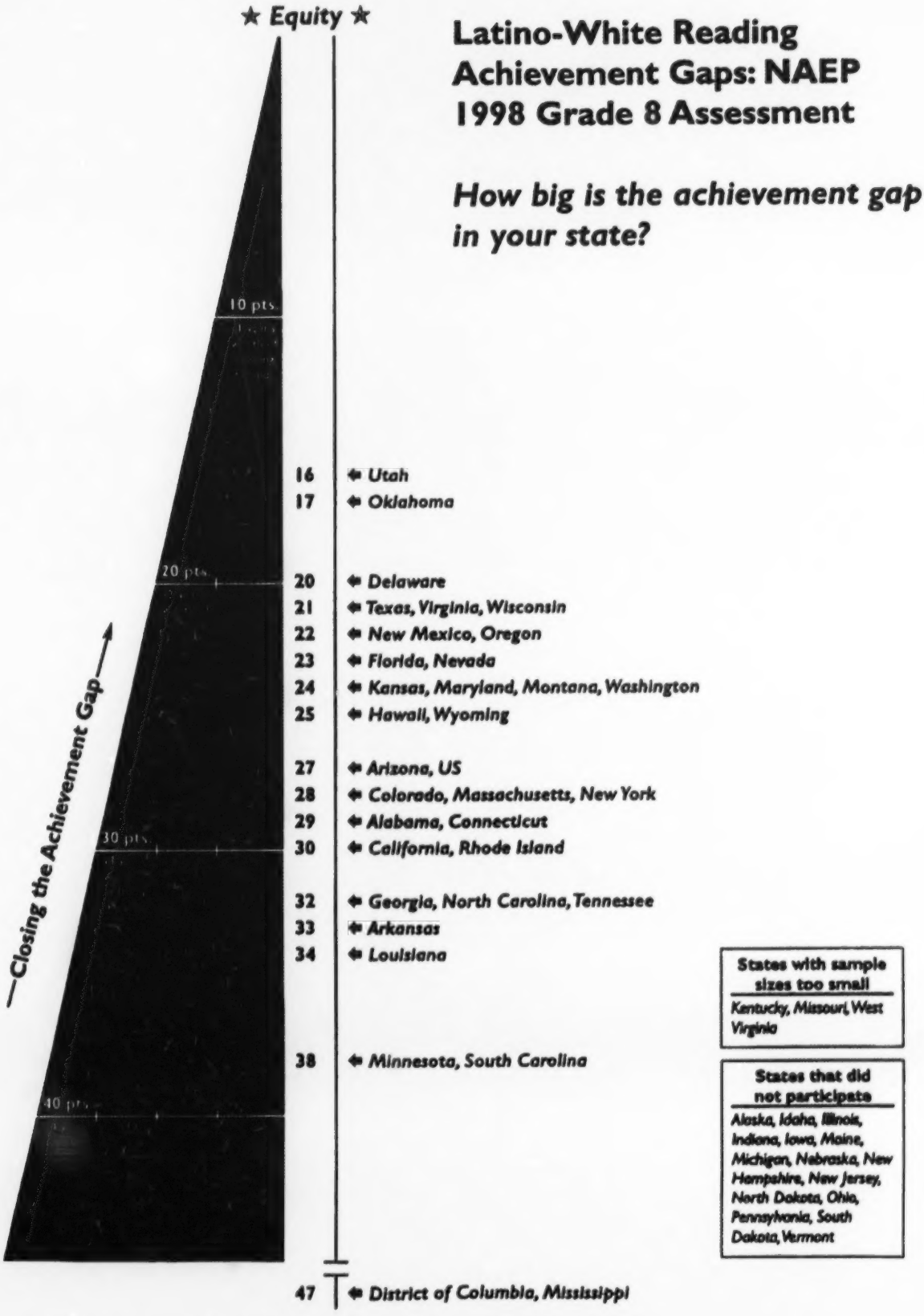
States that did not participate

Alaska, Idaho, Illinois, Indiana, Iowa, Maine, Michigan, Nebraska, New Hampshire, New Jersey, North Dakota, Ohio, Pennsylvania, South Dakota, Vermont

Note: Gaps are measured by the point difference between minority and White average scale scores.

Latino-White Reading Achievement Gaps: NAEP 1998 Grade 8 Assessment

How big is the achievement gap in your state?



States with sample sizes too small

Kentucky, Missouri, West Virginia

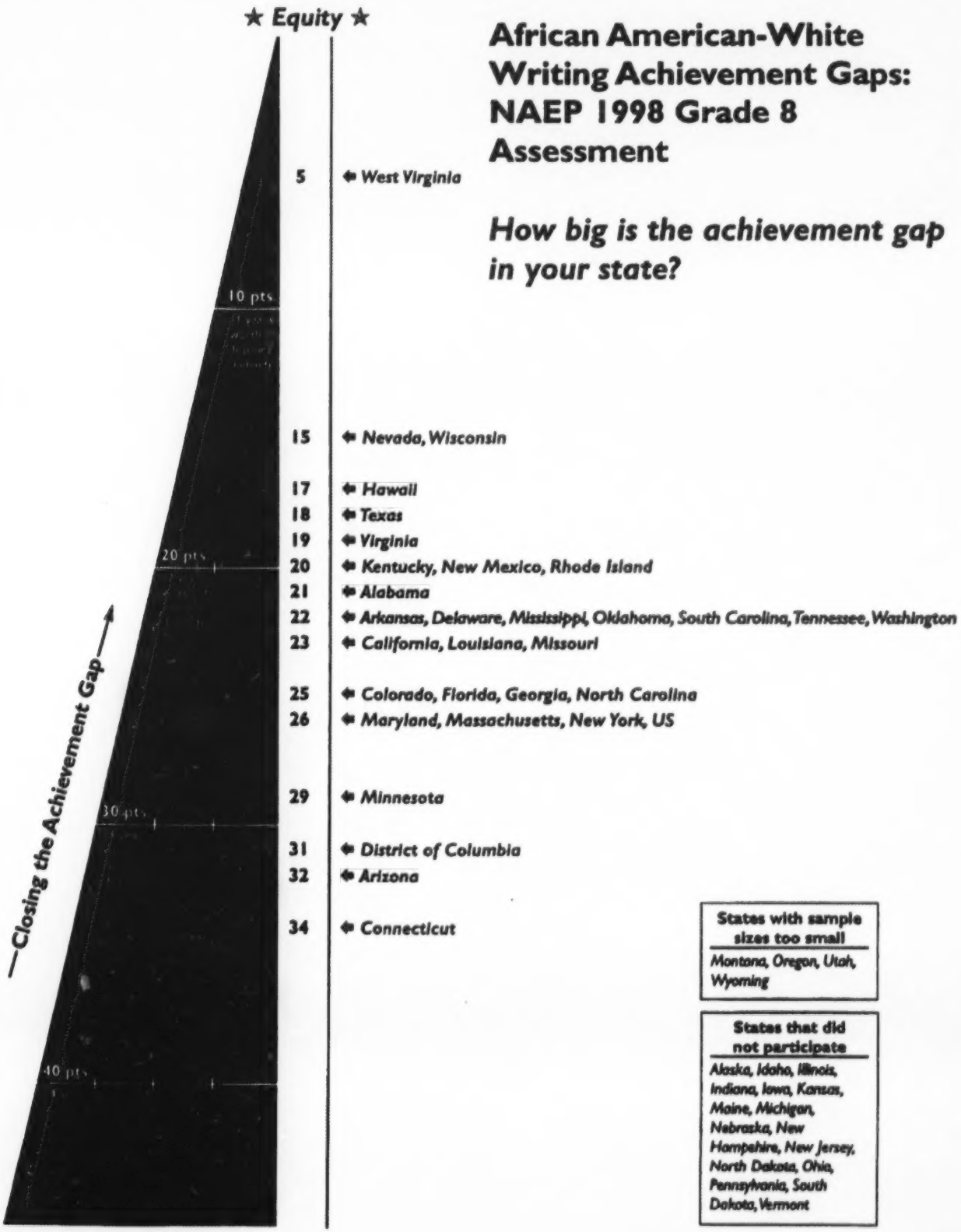
States that did not participate

Alaska, Idaho, Illinois, Indiana, Iowa, Maine, Michigan, Nebraska, New Hampshire, New Jersey, North Dakota, Ohio, Pennsylvania, South Dakota, Vermont

Note: Gaps are measured by the point difference between minority and White average scale scores.

African American-White Writing Achievement Gaps: NAEP 1998 Grade 8 Assessment

How big is the achievement gap in your state?


★ Equity ★
10 pts
20 pts
30 pts
40 pts
—Closing the Achievement Gap—
5 ⇐ West Virginia
15 ⇐ Nevada, Wisconsin
17 ⇐ Hawaii
18 ⇐ Texas
19 ⇐ Virginia
20 ⇐ Kentucky, New Mexico, Rhode Island
21 ⇐ Alabama
22 ⇐ Arkansas, Delaware, Mississippi, Oklahoma, South Carolina, Tennessee, Washington
23 ⇐ California, Louisiana, Missouri
25 ⇐ Colorado, Florida, Georgia, North Carolina
26 ⇐ Maryland, Massachusetts, New York, US
29 ⇐ Minnesota
31 ⇐ District of Columbia
32 ⇐ Arizona
34 ⇐ Connecticut

States with sample sizes too small
Montana, Oregon, Utah, Wyoming

States that did not participate
Alaska, Idaho, Illinois, Indiana, Iowa, Kansas, Maine, Michigan, Nebraska, New Hampshire, New Jersey, North Dakota, Ohio, Pennsylvania, South Dakota, Vermont

Note: Gaps are measured by the point difference between minority and White average scale scores.

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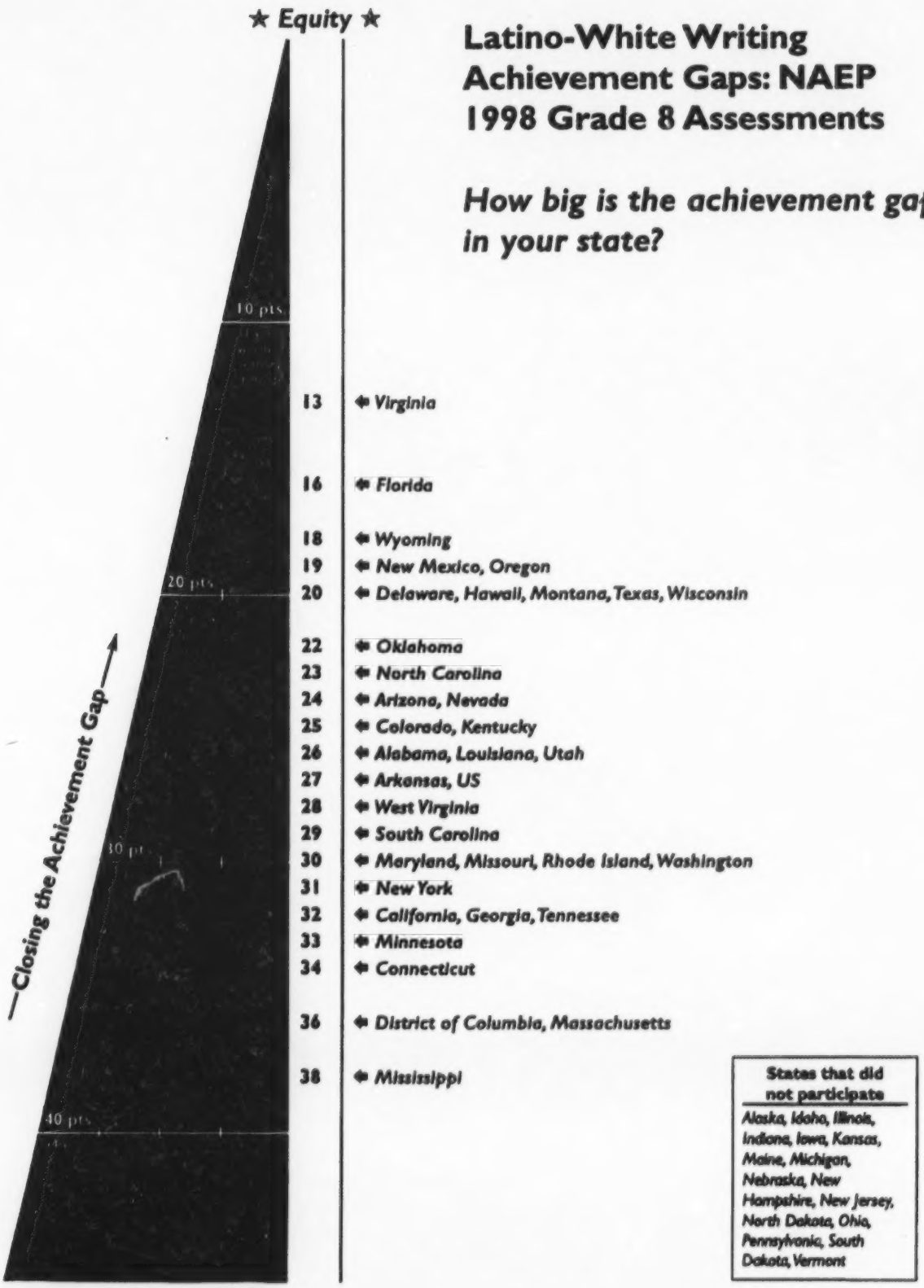
Latino-White Writing Achievement Gaps: NAEP 1998 Grade 8 Assessments

How big is the achievement gap in your state?



States that did not participate

Alaska, Idaho, Illinois, Indiana, Iowa, Kansas, Maine, Michigan, Nebraska, New Hampshire, New Jersey, North Dakota, Ohio, Pennsylvania, South Dakota, Vermont

22 **Note:** Gaps are measured by the point difference between minority and White average scale scores.

PENNSYLVANIA

References

Please note: For calculations and technical notes, please see our *Definitions and Sources* online at www.edtrust.org.

STUDENT PROFILE

Population Ages 5-24
Department of Commerce, Bureau of the Census, Current Population Survey. July, 1999. Calculations by Marie Pees.

Public K-12 Enrollments
Common Core of Data School Years 1993-94 through 1997-98 CD-ROM, (Washington D.C.: National Center for Education Statistics, U.S. Department of Education, December 1999)

Private K-12 Enrollments
Private School Universe Survey, 1997-98, (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, August 1999). Tabulations by the National Education Data Resource Center.

Two-Year and Four-Year Colleges Enrollments
Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Survey, 1997, (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, 1999). Tabulations by the National Education Data Resource Center.

PERFORMANCE

Academic Achievement:

National Assessment of Educational Progress (NAEP) Proficiency Levels
All data were all obtained online through NCES using the NAEP Summary Data Tables:
http://nces.ed.gov/nationsreportcard/TABLES/SDTTOOL.HTM

SAT/ACT Composite Scores and Test-takers
SAT—*College-Bound Seniors: 2000 Profile of SAT Program Test Takers, and State SAT Scores, 1988-2000* (Princeton, N.J.: The College Board, 2000).

ACT—*ACT High School Profile Report, High School Graduating Class of 2000, National and State Reports*, (Iowa City, IA: American College Testing (ACT), 2000).

Attainment:

8th Graders, 1993-1994: *Common Core of Data School Years 1993-94 through 1997-98* CD-ROM (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, December 1999)

Graduates, 1998: *State Nonfiscal Public Elementary/Secondary Education Survey Data*, (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, December 2000) Percentages calculated by the Education Trust.

Chances for College
Postsecondary Education Opportunity, August 2000. Calculations by Tom Mortenson. (Oskaloosa, IA: Thomas Mortenson, 2000). For more information, go to the Postsecondary Education OPPORTUNITY website at: http://www.postsecondary.org/

First-time Freshman, 1993—*Integrated Postsecondary Education Data System* (IPEDS), *Fall Enrollment Survey, 1993-94*, (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education). Tabulations provided by the National Education Data Resource Center. Calculations by the Education Trust.

Bachelors Degrees Awarded, 1997—*Integrated Postsecondary Education Data System (IPEDS), Completions Survey, 1996-97*, (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education). Tabulations provided by the National Education Data Resource Center. Calculations by the Education Trust.

OPPORTUNITY: INVESTMENTS IN WELL-PREPARED TEACHERS

Percentage of Secondary School Classes Taught by Underqualified Teachers
1993-94 Schools and Staffing Survey, (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education). Calculations by Richard Ingersoll, University of Georgia., published by the Education Trust, *Thinking K-16* (Washington, D.C.: The Education Trust, Summer 1998)

Percentage of Eighth Grade Math Students Taught by Math Majors
NAEP 1996 Summary Data Tables – Teacher Data Tables, (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, 1997), nces.ed.gov/NAEP/table96.

PENNSYLVANIA

References

OPPORTUNITY: INVESTMENTS IN CHALLENGING CURRICULA

Enrollment in High-Level Courses

8th Grade Algebra—*NAEP 1996 Summary Data Tables – Student Data Tables*, (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, 1997), nces.ed.gov/NAEP/tables96.

Algebra II and Chemistry—Council of Chief State School Officers, *State Education Assessment Center, State Indicators of Science and Mathematics Education 1999—State Trends and New Indicators from the 1997-98 School Year, Table 17.* (Washington, D.C.: Council of Chief State School Officers, 1997). Available online at http://www.ccsso.org/SciMathIndicators99.html.

Special student placements: Gifted and Talented, Special Education and Suspensions—U.S. Department of Education, Office for Civil Rights, *1998 Elementary and Secondary School Civil Rights Compliance Report*, (Washington: D.C.: Office for Civil Rights, U.S. Department of Education, 2000).

Composition of AP Test Takers

The College Board, *2000 Advanced Placement State and National Summary Reports*, (Princeton, N.J.: The College Board, 2000).

OPPORTUNITY: INVESTMENT IN EFFECTIVE INSTRUCTION

Effective math and science instruction

NAEP 1996 Summary Data Tables – Teacher Data Tables, (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, 1997), http://nces.ed.gov/nationsreportcard/tables96/.

OPPORTUNITY: FINANCIAL INVESTMENTS

State and Local Revenues of School Districts, by Child Poverty and Student Minority Status—Calculations conducted for the Education Trust by Greg F. Orlofsky, using a database constructed for the purpose from the data sources described below:

- Adjusted school district revenues: *F-33 Annual Survey of Local Government Finances, 1997, Data Files*, (Washington, DC, U.S. Census Bureau, 2000)
- Minority students by district: *Common Core of Data School Years 1993-94 through 1997-98* CD-ROM, (Washington D.C.: National Center for Education Statistics, U.S. Department of Education, December 1999)
- Children in poverty by district: *Small Area Income and Poverty Estimates: School District Estimates*, (Washington, DC, U.S. Census Bureau, 2000)

Per Pupil Investment

Early Estimates of Public Elementary and Secondary Education Statistics: School Year 1999-2000 (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, June 2000).

Effort, 1997-98

Gross state product — Regional Accounts Data, U.S. Department of Commerce, Bureau of Economic Analysis, available at http://www.bea.doc.gov/bea/regional/gsp.

State and local revenue — *Revenues and Expenditures for Public Elementary and Secondary Education: School Year 1997-98* (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, May 2000)

College vs. Prison

State University Costs—American Association of State Colleges and Universities, and the National Association of State Universities and Land-Grant Colleges, *Student Charges and Financial Aid 1998-99, Appendices A and B* (Washington, D.C.: American Association of State Colleges and Universities, and the National Association of State Universities and Land-Grant Colleges, 1999).

Prison Cost—Criminal Justice Institute, *The 1999 Corrections Yearbook*, (South Salem, N.Y.: Criminal Justice Institute, 2000).

Change in State Investments, 1997-99

National Conference of State Legislatures, *State Budget Actions 1997*, (Washington, D.C.: National Conference of State Legislatures, December 1997), and *State Budget Actions 1999*, (Washington, D.C.: National Conference of State Legislatures, December 1999).